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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/738,291	12/18/2000	David L. Hecht	07447.0013	2139

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EXAMINER

PIERRE, MYRIAM

ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/738,291

Applicant(s)

HECHT ET AL.

Examiner

Myriam Pierre

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08/18/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: specification does not have SN and Patent Number of related application.

Appropriate correction is required.

2. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grefenstette (6,396,951) in view of Raman (5,828,885).

As to claim 1, Grefenstette teach

inputting text of a document into a computer(isolate text from a document that

is platen of MFD, multiple function device/computer/scanner, col. 3, line 29-30, and col. 5, lines 23, 25, and 31);
encoding the inputted text in a machine-readable code (**text represented by machine-readable code col. 5, lines 1, and 3-5**),
wherein encoded text is a foreign language translation of the inputted text (**col. 2, lines 35-40**);

Grefenstette does not teach of merging input text with encoded text.

Raman teach merging the inputted text with the encoded text (**merging the original or inputted data with the translated or encoded text, Fig 2**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to encode text from a document and merge the inputted text with the encoded text to generate image data for a language translation. One skilled in the art would have been motivated to combine Raman's merging of two different language files onto one document and use Grefenstette's encoding of inputted text in a machine-readable code for faster translation and to assist a user in reading documents written in foreign languages by enabling a second language translation of the electronic document.

As to claim 2, Grefenstette teach

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rendering a hardcopy of a document (fax machine, multifunctional device **(MFD)**, **col. 3, lines 26-28, and 52**).

Grefenstette does not teach merged data on a hardcopy document

Raman teach merged data **(Fig 2)**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Grefenstette's hardcopy of a document from merged data. One skilled in the art would have been motivated to merge data on a hardcopy document so the user will have a physical copy of the translation.

3. Claims 3-4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grefenstette (6,396,951), in view of Raman (5,828,885), in further view of Hecht (5,221,833).

As to claim 3, Grefenstette and Raman teach using machine-readable code. But does not teach of using glyph as machine-readable code.

However, Hecht teach machine-readable code is a glyph code **(col. 3, lines 40-45)**.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to thus use glyph code as machine-readable code to encode the input and preserve the logical order **(col. 1, lines 33-34)**. One skilled in the art would have been motivated to use machine-readable code as a glyph code to store digital

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images of the text, because it makes for faster transition from hardcopy medium to electronic medium.

As to claim 4, Grefenstette and Raman teach using machine-readable code. But does not teach of using glyph superimposed as machine-readable code.

However, Hecht teach using glyph and merging composing superimposed **(glyph to encode input and composing machine and human readable information into one electronic document)** machine-readable code over the inputted text **(col. 1, lines 33-34 and col. 3, lines 13-20 and 23-27)**.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to merge superimpose machine-readable code over text 'for recording machine readable digital information on...documents' **(col. 1, lines 59-60)**. One skilled in the art would have been motivated to use machine-readable code to encode data with glyph to store a digital image of the text because it makes for faster transition from a hardcopy medium to an electronic medium.

As to claim 9,

Grefenstette teach manually selecting a desired foreign language **(bilingual look-up user option, col. 7, lines 58-60)**;

Grefenstette does not teach of decoding a machine-readable code.

Hecht teach decoding the machine-readable code **(decodes machine-readable code using Gray coding, col. 3, lines 38-50)**.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to identifying the machine-readable code that corresponds to the desired foreign language. One skilled in the art would have been motivated to identify a machine-readable code that represents the language desired to ensure that the user is accurately selecting the correct language thus obtaining a faster translation of the text.

Grefenstette and Hecht also do not teach identifying machine-readable code that corresponds to the language desired.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to identifying the machine-readable code on the document that corresponds to the desired foreign language. One skilled in the art would have been motivated to use identify machine-readable code that represents the language desired to ensure that the user is accurately selecting the correct language thus obtaining an accurate translation of the text.

4. Claims 5, 7-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grefenstette (6,396,951).

As to claim 5 Grefenstette teach,
inputting a document into a computer (**scanner, fax modem, Fig 2, 230**), document comprises human-readable text written (**col. 5, lines 26-27 and Fig 5**) in a first language (**Fig 5**) and at least one foreign language translation of human-

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readable text (**Fig 10**) in machine-readable code (**translation based on text code data, col. 2, lines 37-38 and col. 5, lines 3-4**);
selecting at least one of foreign language translations (**bilingual look-up option, col. 7, lines 58-60**);
and outputting a human-readable translation of said document in selected foreign language (**Fig. 2, 228 Printer, col. 4, lines 7-9**).

As to claim 7 Grefenstette teach,
of OCR of the human-readable text (**image to obtain computer text, Fig. 3 step 10, col. 5, lines 66-67 and col. 6, lines 8-16**).

Grefenstette does not teach inputting step is performing OCR of the human-readable.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to perform an OCR directly from a document to be inputted rather than typing for a more efficient conversion from a document to computer text.

As to claim 10, Grefenstette teach
translating the human-readable text into a human-readable translation of selected foreign language (**col. 7, lines 58-60 and Fig 10**);

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human-readable translation of selected foreign language through the use of the machine-readable code **(machine-readable code/data to obtain translation, col. 1, lines 35-40; col. 4, lines 67, and col. 5, lines 1-3).**

At the time of invention, it would have been obvious to a person of ordinary skill in the art to use machine-readable code for human-readable translation of a selected foreign language. One skilled in the art would have been motivated to use machine-readable coding for language translation to improve translation by computer thus minimizing human error.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grefenstette (6,396,951) in view of Greene et al. (6,628,837)

As to claim 8 Grefenstette does not explicitly teach of an assist channel working with the OCR.

However, Greene teach the step of utilizing an assist channel to perform OCR **(“assist channel” is machine readable encoded side information to aid OCR of contents of a primary channel, col. 1, lines 56-60).**

At the time of invention, it would have been obvious to a person of ordinary skill in the art to use an assist channel. One skilled in the art would have been motivated to use an assist channel to identify failures of the OCR application.

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6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grefenstette (6,396,951), as applied to claim 5 above, in view of Hecht (5,221,833).

As to claim 6,

Grefenstette does not teach of using machine-readable code as a glyph code.

However, Hecht teach machine-readable code is a glyph code (**col. 1, lines 55-60 and col. 3, lines 4-6**).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to convert a document translated from a first language to a second language with Hecht's machine-readable code as a glyph code. One skilled in the art would have been motivated to use machine-readable code as glyph code for text language translation for faster translated text from one language to another and to use machine-readable codes, which are easily recognized by a machine.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows:

Lopresti et al. (5,625,721) teach a new document created from an OCR and a scanned input.

Ittner (5,664,027) teach OCR which is not language dependent.

Zdybel Jr. et al. (5,486,686) teach machine readable digital representation of electronic documents with human readable data.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myriam Pierre whose telephone number is 703-605-1196. The examiner can normally be reached on Monday – Friday from 5:30 a.m. - 2:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Smits can be reached on 703-306-3011. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information As to the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MP

09/28/04


RICHMOND DORVIL
SUPERVISORY PATENT EXAMINER